

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
William A. Hinton State Laboratory Institute  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

06/28/2011

Megan Mahoney  
Assistant District Attorney, Plymouth County

Dear ADA Mahoney,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan and Lisa Glazer
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Lisa Glazer was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "Annie Dookhan".

Annie Dookhan  
Chemist II  
Drug Analysis Lab  
Jamaica Plain, MA. 02130  
(617) 983-6631

## Curriculum Vitae

### **Annie Khan (Dookhan)**

#### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.  
University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

#### **Experience:**

2003 – present

#### Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- \*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- \*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.
- \*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.
- \*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- \*Maintenance and repairs of all analytical instruments.
- \*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- \* Responsible for the Quality Control/Quality Assurance program for the drug lab.
- \*Notary Public.
- \*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

#### QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- \*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- \*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- \*Writing, revising and reviewing Standard Operating Procedures (SOPs).
- \*Trained and supervised new chemists and interns for the department.
- \*Routine QC testing of products for the FDA.
- \*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- \*Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- \*Complete testing of chemicals for Vendor Validation Project for the FDA.
- \*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

#### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)  
GLP/GMP course with Massachusetts Biologic Laboratory.  
QC/QA training according to FDA Codes and Regulations.  
GC and GC/MS courses with Agilent Technologies and Restek.  
HPLC course with Waters Cooperation.  
FTIR course with Spectros.  
TOC training with MBL and Sievers.

#### **Association:**

American Chemical Society (ACS)  
Northeastern Association of Forensics Science (NEAFS)

## Curriculum Vitae

Lisa A. Glazer

### Education

Bachelor of Science Degree, CHEMISTRY January 2006  
UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Bachelor of Science Degree, FORENSIC SCIENCE January 2006  
UNIVERSITY OF NEW HAVEN

Coursework included: Organic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus, Biology, Criminal Justice and Forensic Science courses

### Employment

Chemist I, II State Laboratory Institute (May 2007-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2007.

Laboratory Technician I (August 2006 – May 2007)

University of Connecticut Chemistry Department - Storrs, CT

- Prepared unknowns, chemical reagents and supplies for undergraduate chemistry courses
- Set-up experiment demonstrations
- Properly disposed of hazardous waste from the experiments
- Made sure labs were being conducted safely
- Kept track of student laboratory paperwork, inventoried glassware and chemicals and helped clean glassware

Intern (September 2005 – November 2005)

CONNECTICUT STATE POLICE FORENSIC LABORATORY - Meriden, CT

- Worked on a Pyrolysis Gas Chromatography project
- Observed in the GSR testing, Forensic Biology, DNA, Questioned Documents, Black and White Photo, Latent Prints, Firearms, Trace Evidence and Color Photo Units

**PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION**

## *The Commonwealth of Massachusetts*

## *Executive Office of Health and Human Services*

## *Department of Public Health*

## *State Laboratory Institute*

## Boston Drug Laboratory

Tel (617) 983-6622

Fax (617) 983-6625

## **Amherst Drug Laboratory**

Tel (413) 545-2601

Fax (413) 545-2608

## Boston Hours

Amherst Hours

8:00 - 11:00

2:00 - 4:00

### **DRUG RECEIPT**

9:00 - 12:00

1:00 - 3:00

**City or Department:** Brockton Police Department      **Police Reference No.:** \_\_\_\_\_

**Police Reference No.:**

**Name and Rank of Submitting Officer:** DONOHUE, PATRICK S 380 DOC # R013564

**Defendant(s) Name (last,first,initial):**

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*To be completed by Submitter*

### Description of Items Submitted

*To be completed by Lab Personnel*

### **Gross Weight**

**Lab Number**

Received By:

Date:

1-20-11

No. [REDACTED] Date Analyzed: 3/28/11

City: Brockton Police Dept.

Officer: Detective PATRICK DONOHUE

Def: [REDACTED]

Amount: Subst: SUB

No. Cont: 6 Cont: pb

Date Rec'd: 01/20/2011

No. Analyzed: 2

Gross Wt.: 10.44

Net Weight: 1.42

# Tests: 1.2-10

• HXG

Prelim: cocaine (W) Findings: cocaine

# DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Production ANALYST ADJ

No. of samples tested: \_\_\_\_\_ Evidence Wt: \_\_\_\_\_

PHYSICAL DESCRIPTION: Gross Wt ( 6 ): 1.6336

Off white chalky substance Gross Wt ( ) : \_\_\_\_\_

17.6gss Pkg. Wt: \_\_\_\_\_

Net Wt: \_\_\_\_\_

1 pb=large

5 pb's = small

large = present 1 pb = 0.8886

net wt = 0.8063

small = present 5 pb's = 0.7452

present 1 pb = 0.1883

net wt = 0.1240

## PRELIMINARY TESTS

### Spot Tests

Cobalt

✓ Thiocyanate ( - ) +

✓ Marquis —

✓ Froehde's —

✓ Mecke's —

### Microcrystalline Tests

Gold

✓ Chloride +

✓ TLTA ( - ) +

### OTHER TESTS

## PRELIMINARY TEST RESULTS

RESULTS cocaine

DATE 3-23-11

## GC/MS CONFIRMATORY TEST

RESULTS cocaine

MS  
OPERATOR LA 6

DATE 3-28-11

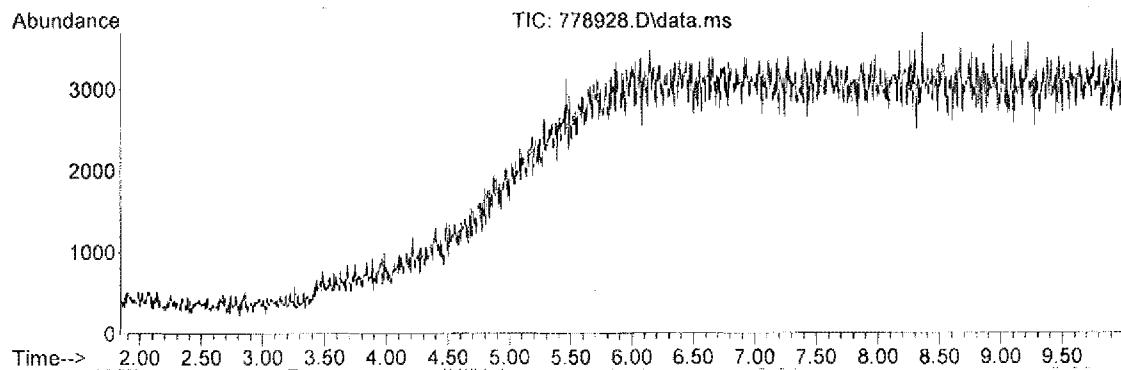
Area Percent / Library Search Report

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Operator : LAG  
Date Acquired : 25 Mar 2011 17:10  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

LAG  
6/23/11

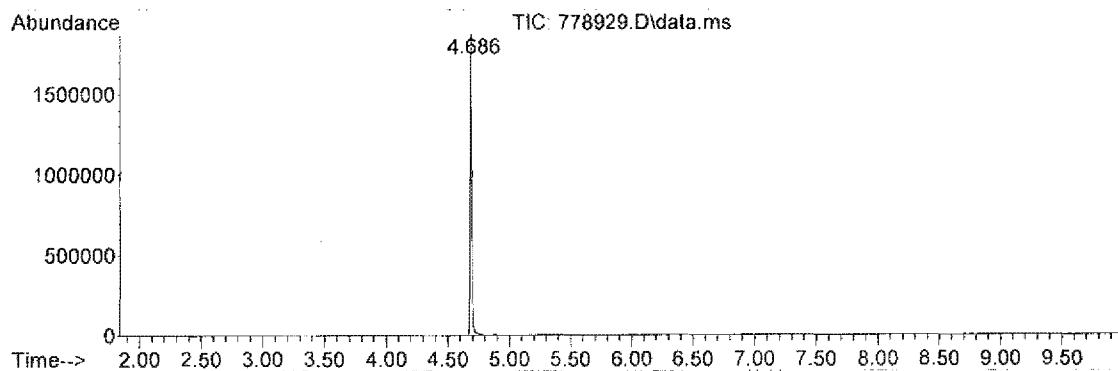
Area Percent / Library Search Report

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Operator : LAG  
Date Acquired : 25 Mar 2011 17:23  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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Area Percent / Library Search Report

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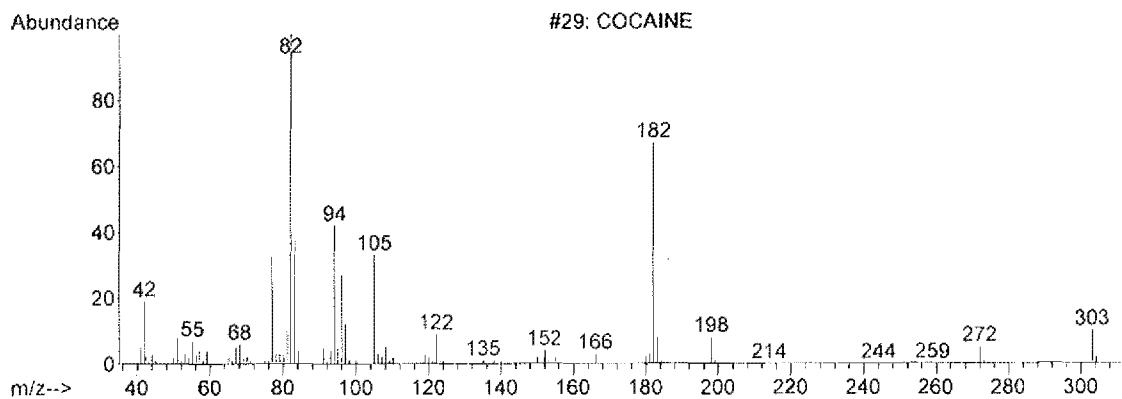
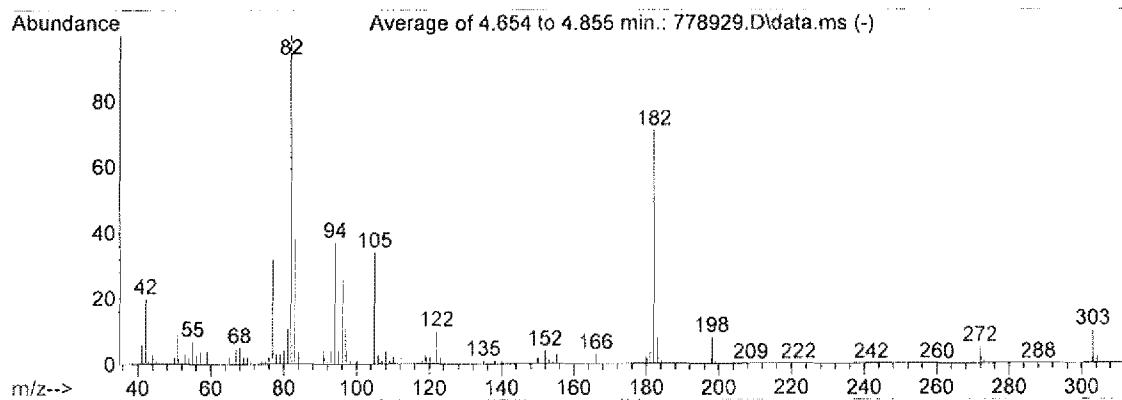
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Date Acquired : 25 Mar 2011 17:23  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.69	C:\Database\SLI.L COCAINE	000050-36-2	99



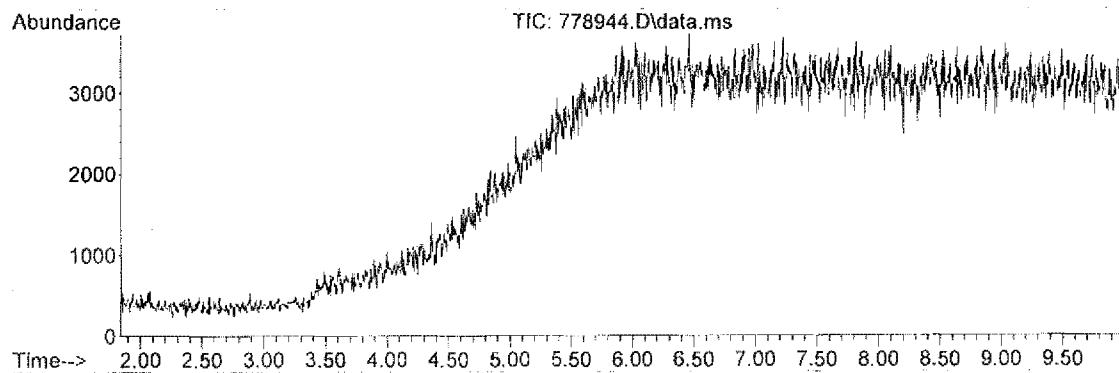
Area Percent / Library Search Report

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Sample Name : BLANK  
Submitted by : ASD  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

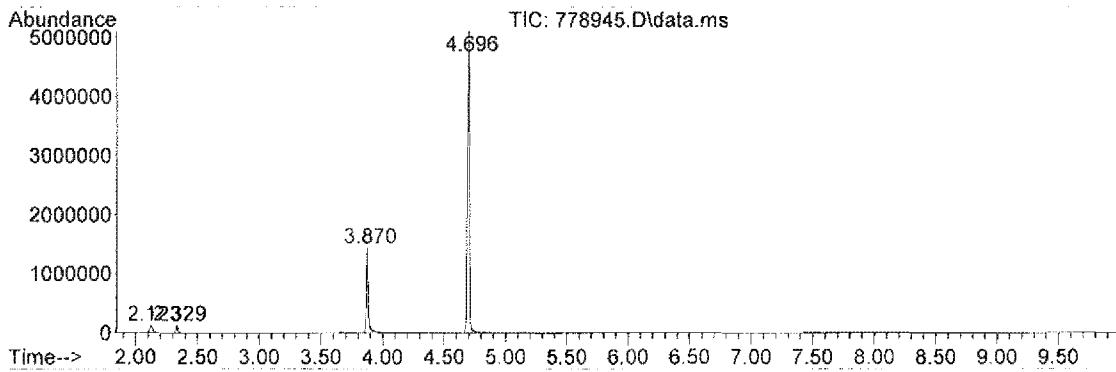
Area Percent / Library Search Report

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Operator : LAG  
Date Acquired : 25 Mar 2011 20:45  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
2.123	229349	2.85	3.86
2.329	130032	1.61	2.19
3.870	1749370	21.72	29.42
4.696	5947200	73.82	100.00

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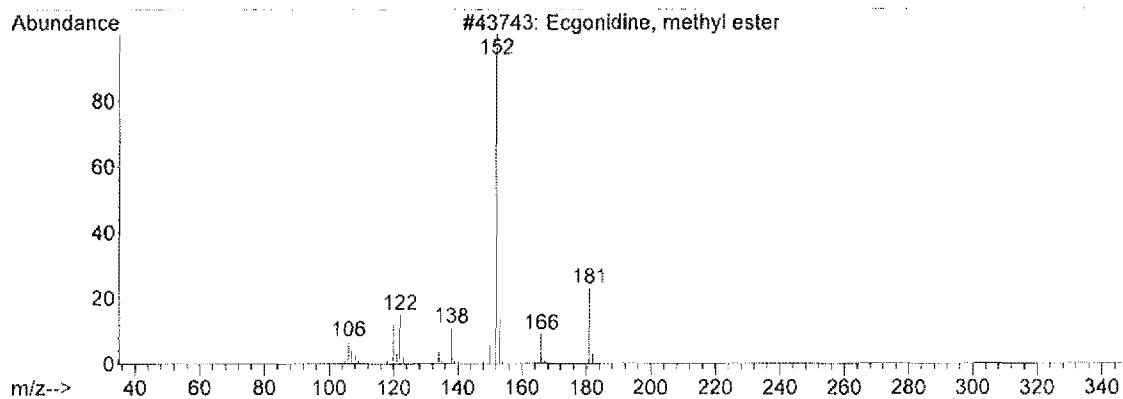
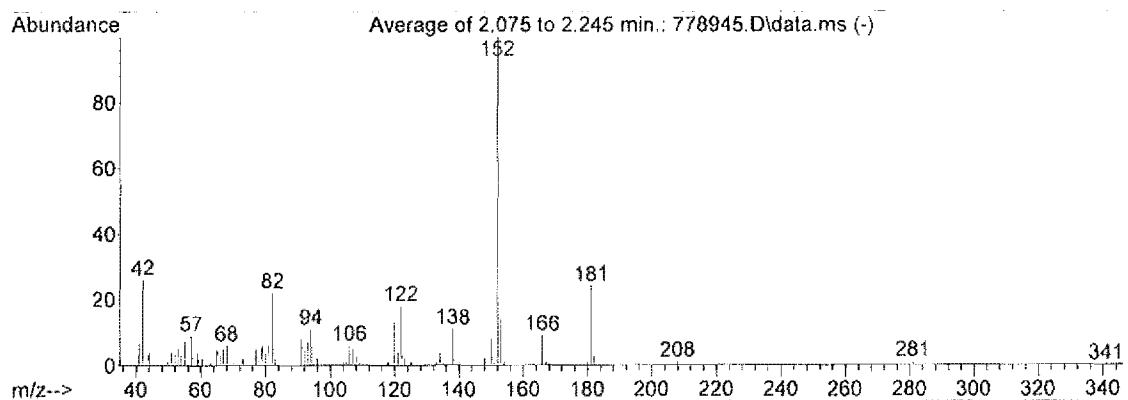
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Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	2.12	C:\Database\NIST05a.L		
		Egonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	96
		2(1H)-Pyridinone, 4-hydroxy-6-methy	007135-82-2	47



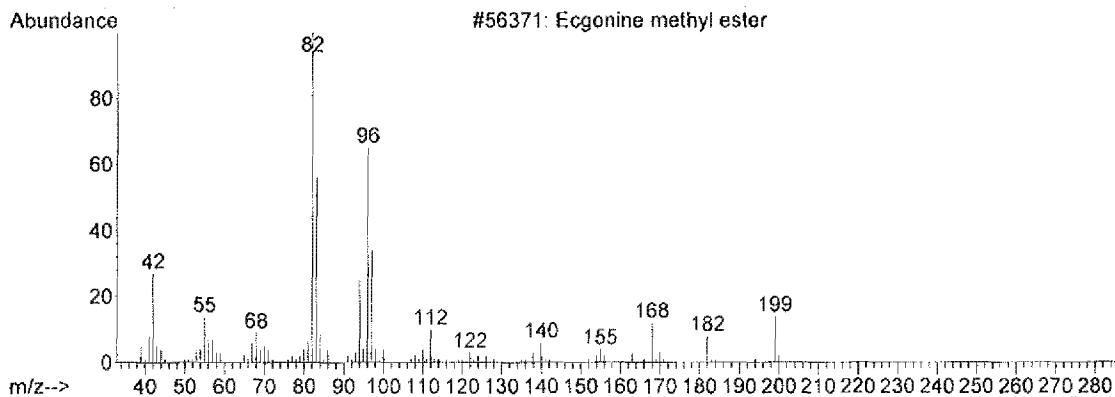
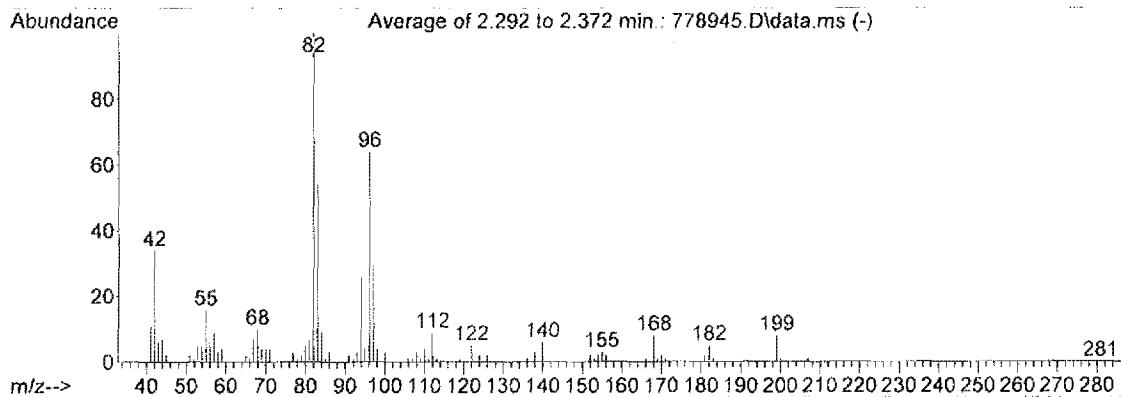
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Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	2.33	C:\Database\NIST05a.L		
		Ecgonine methyl ester	106293-60-1	98
		Ecgonine methyl ester	106293-60-1	97
		Pseudoecgonine methyl ester	099189-88-5	96



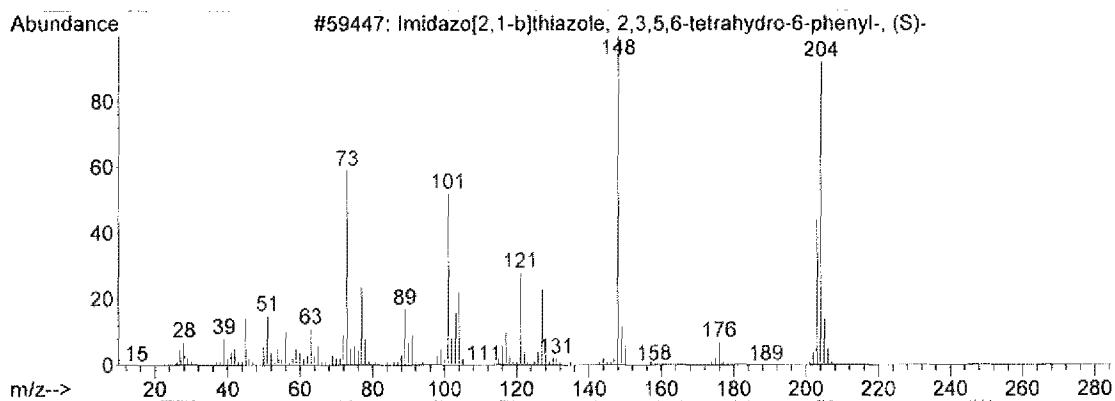
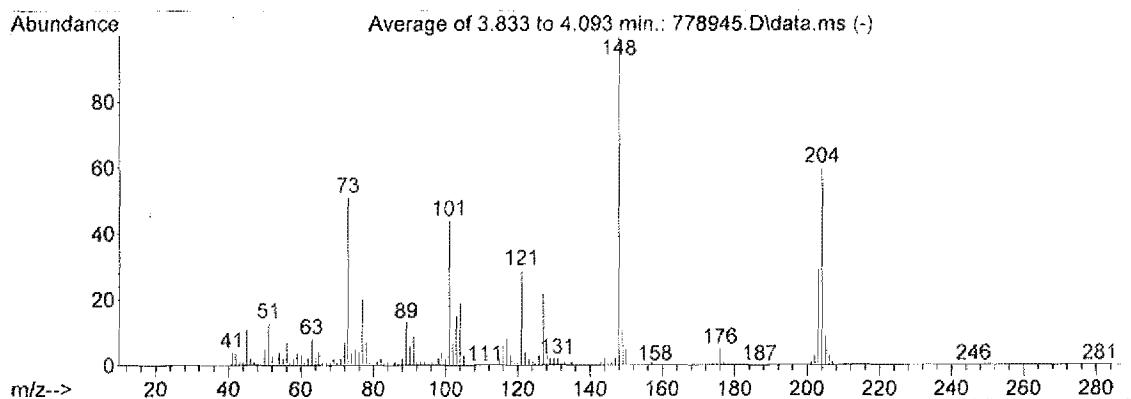
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Date Acquired : 25 Mar 2011 20:45  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
3	3.87	C:\Database\NIST05a.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	98



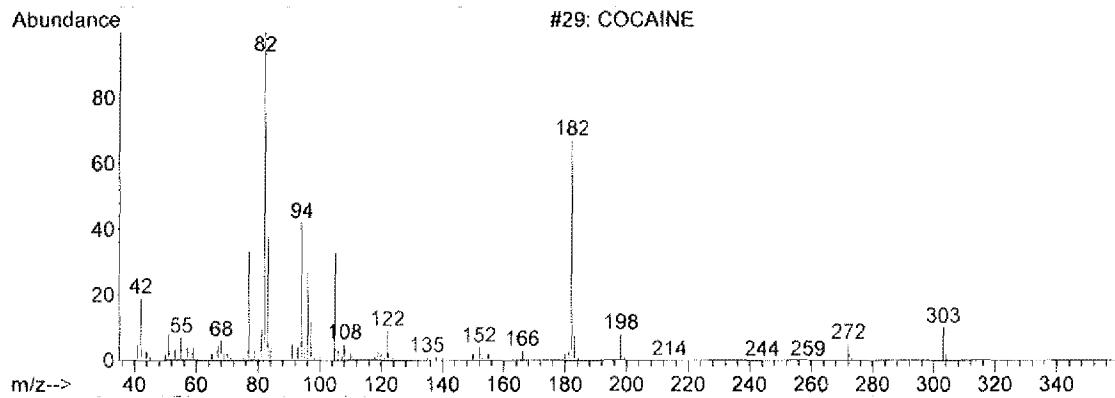
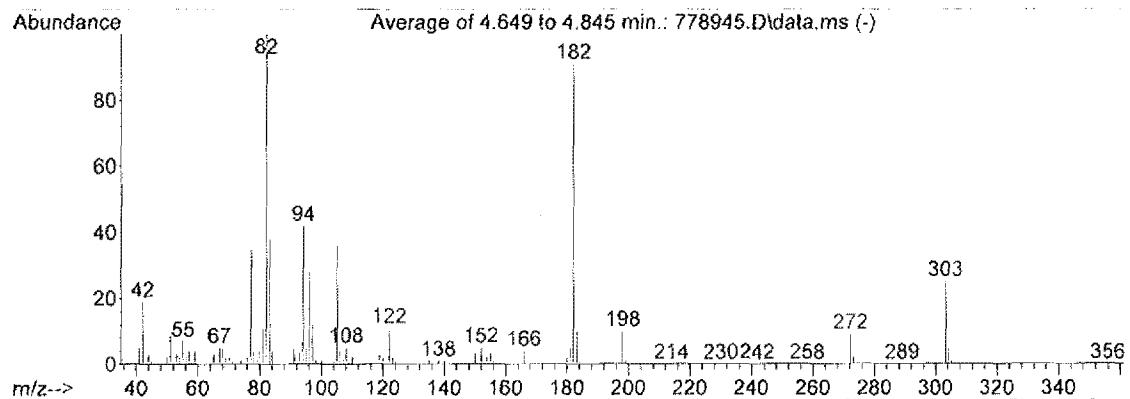
Area Percent / Library Search Report

Information from Data File:

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Date Acquired : 25 Mar 2011 20:45  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 45  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	4.70	C:\Database\SLI.L COCAINE	000050-36-2	99



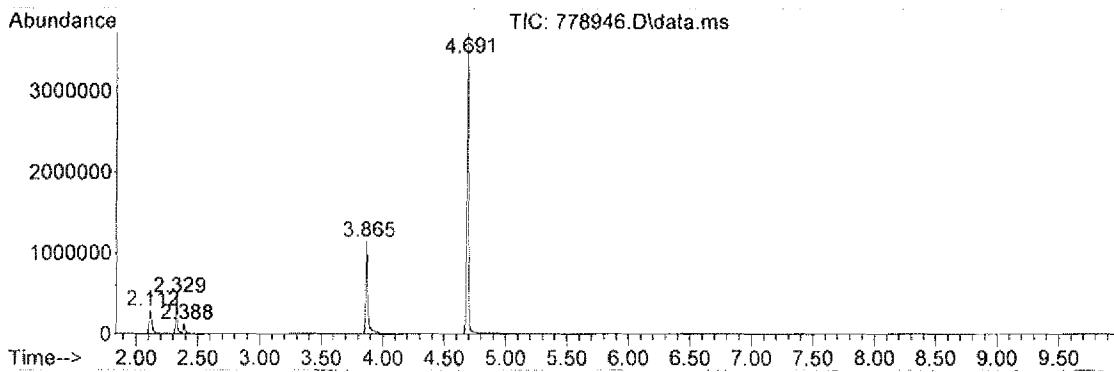
Area Percent / Library Search Report

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Operator : LAG  
Date Acquired : 25 Mar 2011 20:57  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 46  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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2.112	411033	6.52	10.53
2.329	403939	6.41	10.35
2.388	138594	2.20	3.55
3.865	1444887	22.93	37.03
4.691	3902246	61.93	100.00

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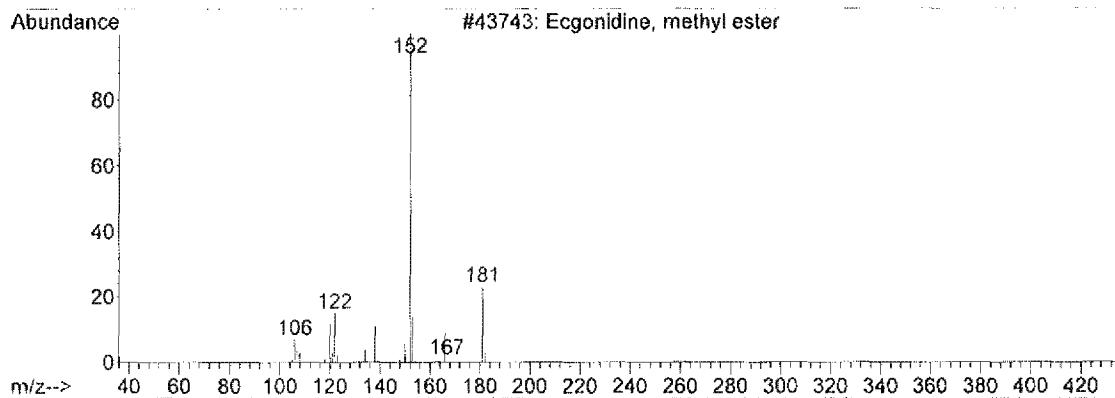
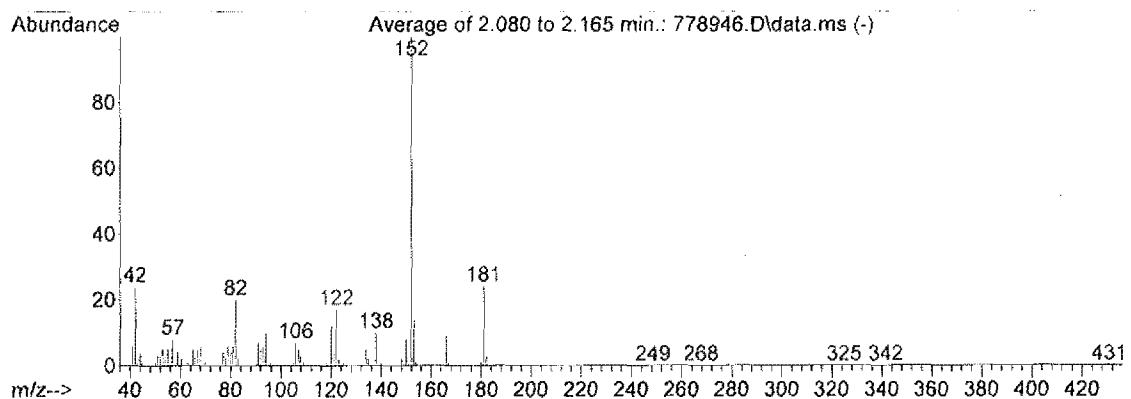
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Date Acquired : 25 Mar 2011 20:57  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 46  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	2.11	C:\Database\NIST05a.L		
		Egonidine, methyl ester	127379-24-2	98
		2-Carbomethoxy-8-methyl-8-azabicycl	043021-26-7	95
		2(1H)-Pyridinone, 4-hydroxy-6-methy	007135-82-2	47



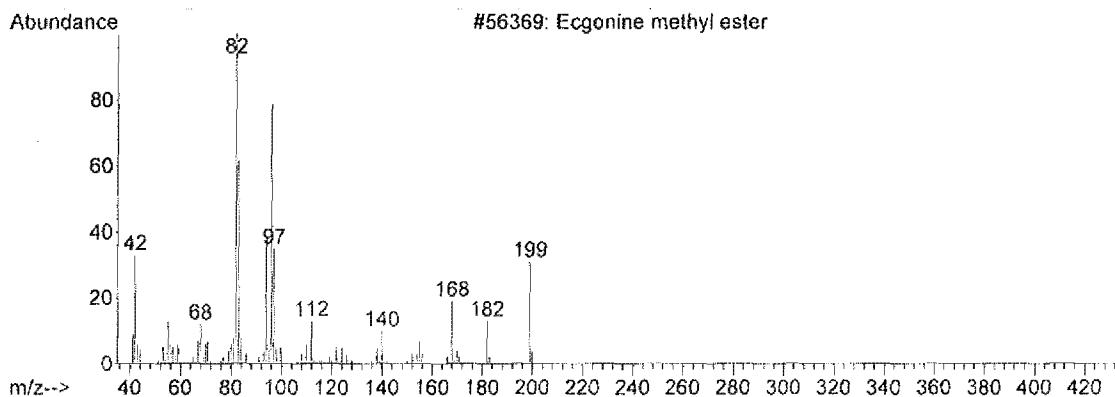
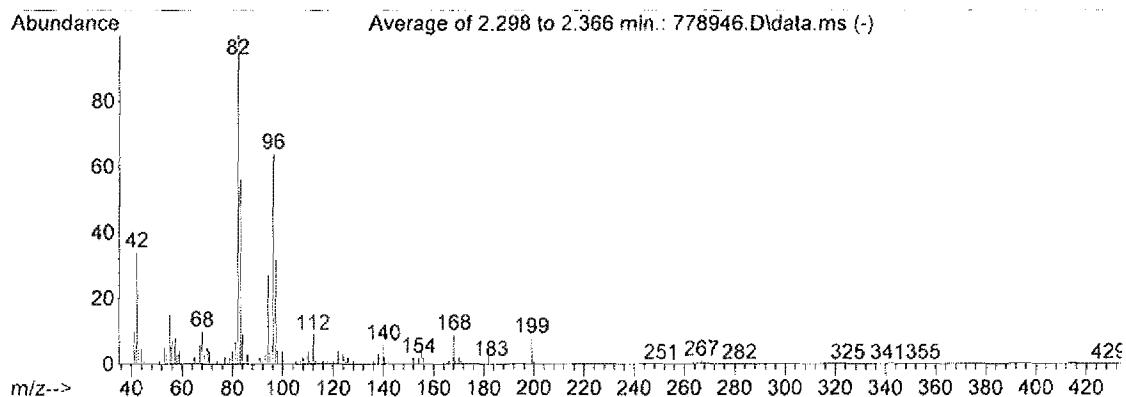
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 Date Acquired : 25 Mar 2011 20:57  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 46  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	2.33	C:\Database\NIST05a.L		
		Ecgonine methyl ester	106293-60-1	98
		Ecgonine methyl ester	106293-60-1	97
		Ecgonine methyl ester	106293-60-1	97



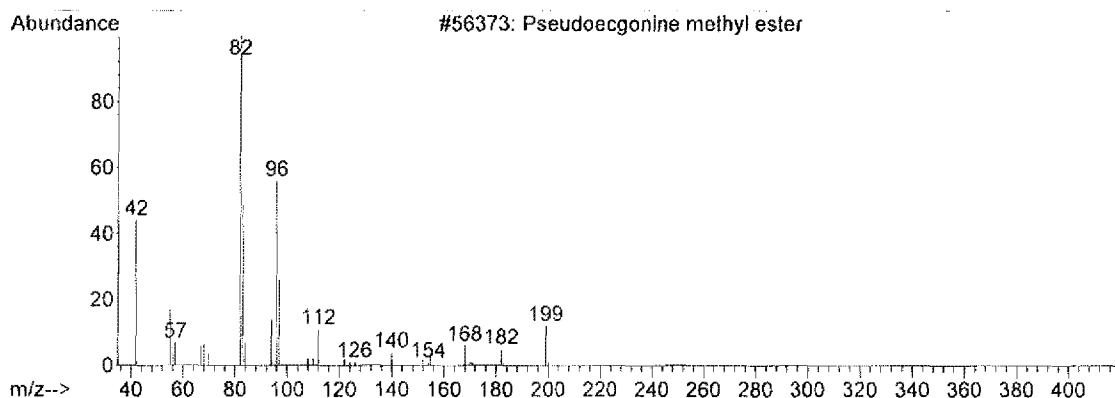
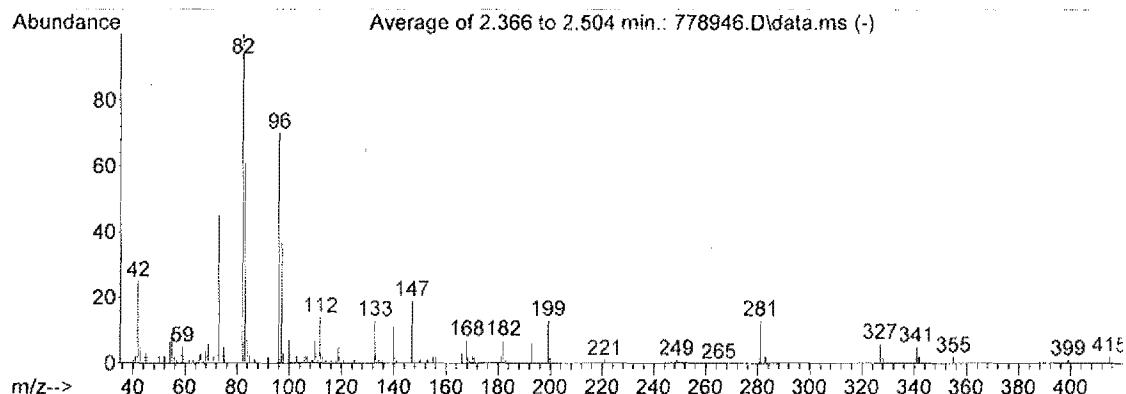
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Operator : LAG  
Date Acquired : 25 Mar 2011 20:57  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 46  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
3	2.39	C:\Database\NIST05a.L		
		Pseudoecgonine methyl ester	099189-88-5	90
		Ecgone methyl ester	106293-60-1	81
		Ecgone methyl ester	106293-60-1	74



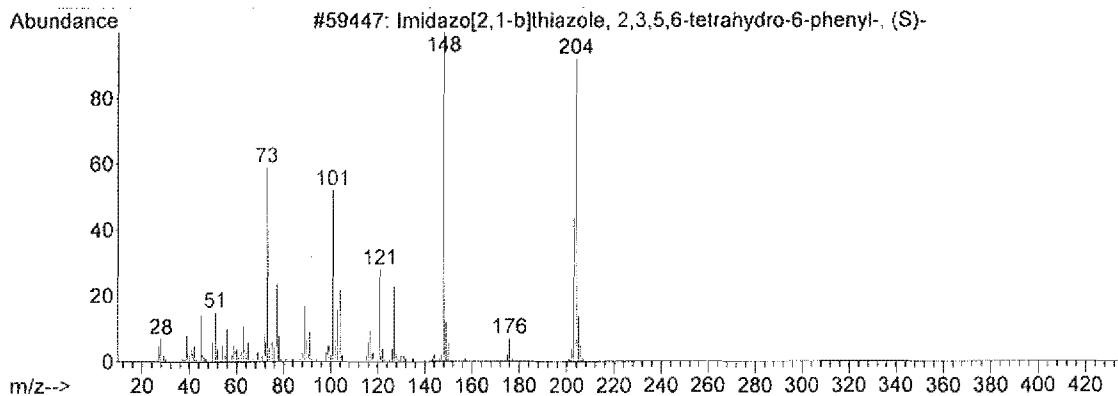
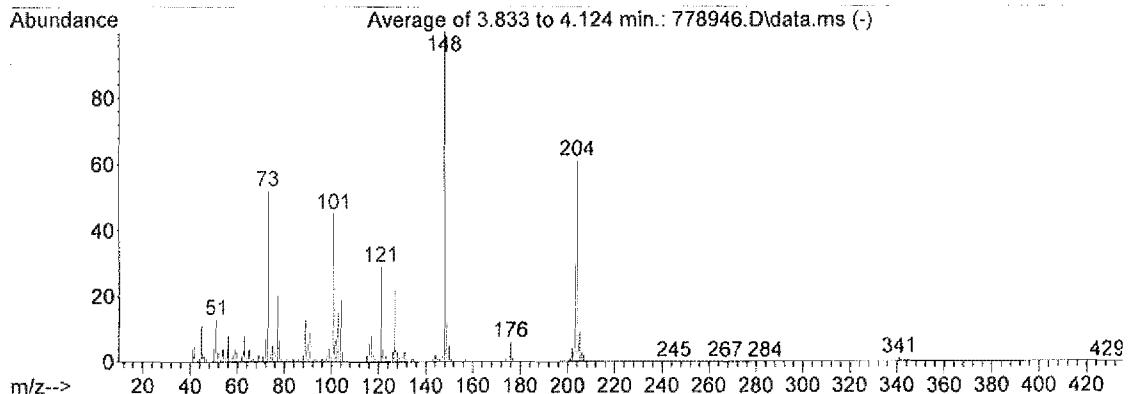
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 Operator : LAG  
 Date Acquired : 25 Mar 2011 20:57  
 Sample Name : XXXXXXXXXX  
 Submitted by : ASD  
 Vial Number : 46  
 AcquisitionMeth: DRUGS.M  
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
 C:\Database\NIST05a.L Minimum Quality: 80  
 C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
4	3.86	C:\Database\NIST05a.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98



Area Percent / Library Search Report

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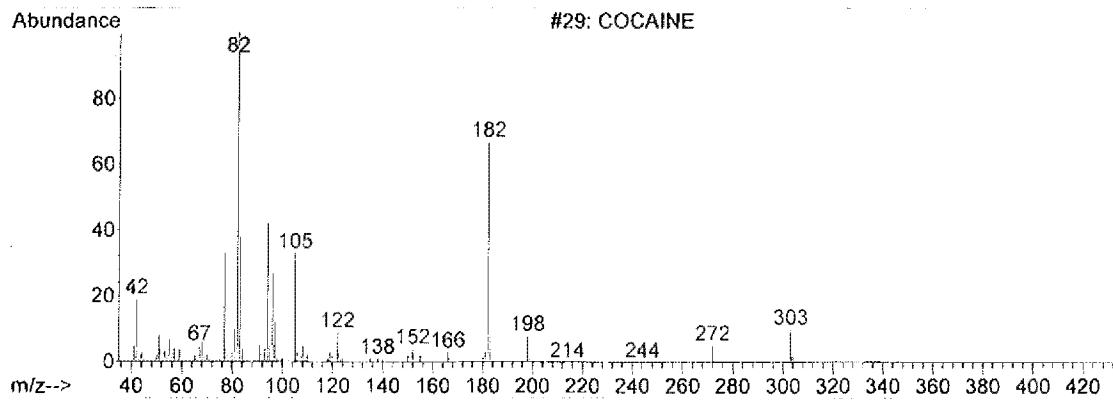
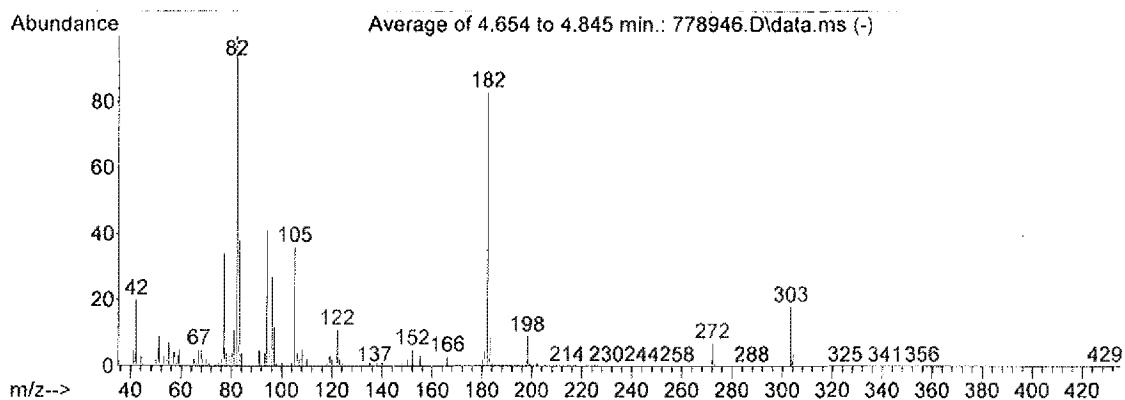
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Date Acquired : 25 Mar 2011 20:57  
Sample Name : XXXXXXXXXX  
Submitted by : ASD  
Vial Number : 46  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

---

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
5	4.69	C:\Database\SLI.L COCAINE	000050-36-2	99



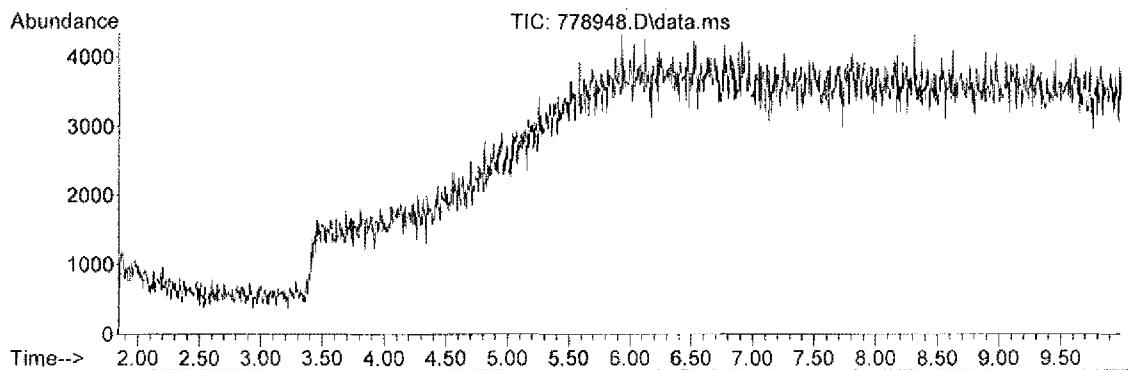
Area Percent / Library Search Report

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Operator : LAG  
Date Acquired : 25 Mar 2011 21:23  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

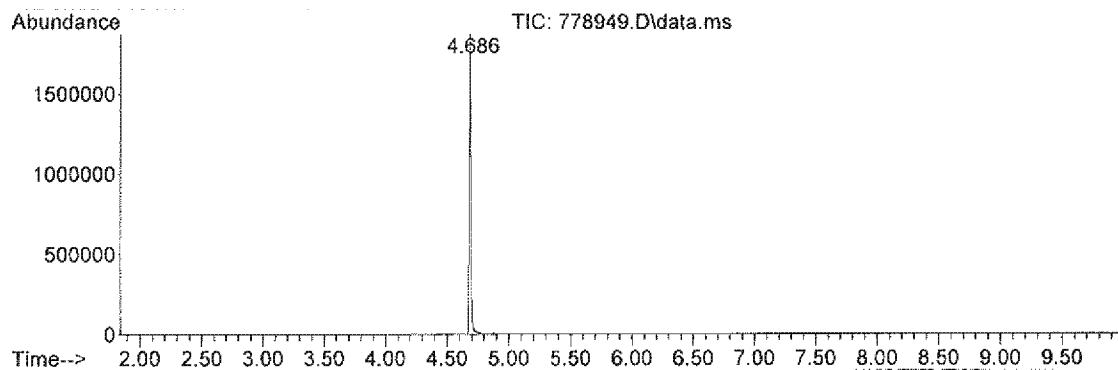
Area Percent / Library Search Report

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Information from Data File:

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Operator : LAG  
Date Acquired : 25 Mar 2011 21:35  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
4.686	1727548	100.00	100.00

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## Area Percent / Library Search Report

## Information from Data File:

File Name : C:\msdchem\1\System7\03\_25\_11\778949.D  
Operator : LAG  
Date Acquired : 25 Mar 2011 21:35  
Sample Name : COCAINE STD  
Submitted by :  
Vial Number : 6  
AcquisitionMeth: DRUGS.M  
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80  
C:\Database\NIST05a.L Minimum Quality: 80  
C:\Database\PMW\_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.69	C:\Database\SLI.L COCAINE	000050-36-2	99

